



UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/184,878	11/03/98	OHNISHI	M 981331

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MM42/0914

EXAMINER

REED, J

ART UNIT	PAPER NUMBER
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2835

DATE MAILED: 09/14/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/184,878

Applicant(s)
Ohnishi et al.

Examiner
John Reed

Group Art Unit
2835



☒ Responsive to communication(s) filed on Jan 29, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-23 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-13 and 18-23 is/are rejected.

☒ Claim(s) 14-17 is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Specification

1. A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.

Claim Objections

2. Claims 14-17 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 1-4, 18 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by *Varghese et al.* Regarding claims 1-4 and 18, the hard disk drive support apparatus **60** of *Varghese et al.* includes a plurality of vibration/shock absorbing members **70** between a disk unit **10** and a lid member **38** which covers a disk unit accommodating part **78** provided in a housing **12**, all as shown in Figs. 1 and 4. In addition, there is a sheet member **62** provided between said disk unit and said vibration/shock absorbing members.

Regarding claim 19, an alternate interpretation of the components comprising the invention of *Varghese et al.* is afforded via the Office's mandate that the Examiner give the claims the broadest reasonable interpretation consistent with the specification. Consistent with this mandate, the device of *Varghese et al.* alternately shows a disk drive accommodating part **78**, a lid member **38** and a vibration/shock absorbing member **60** formed by a plurality of small pieces **70**, and a sheet member **62**.

5. Claims 5-9, 20 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by *Hager et al.* The disk drive vibration and shock isolation system of *Hager et al.* includes a disk unit **12**, a plurality of small vibration/shock absorbing members **64**, **68** between said disk unit and the bottom and side surfaces of a disk unit accommodating part **14**, all of which is depicted in Fig. 4

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and is inside a housing described at column 2, line 61. In addition, said members are composed of various types of materials with differing vibration/shock absorbing characteristics, as described at column 4, lines 3-4 (noting SORBOTHANE brand elastomer of hardness 30), and at column 5, lines 40-42 (noting SORBOTHANE brand elastomers of hardness 50, and 40), each with slightly variant chemical compositions.

6. Claims 10-12, 22 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by *Lawson*. The disk drive isolation system of *Lawson* includes a plurality of shock/vibration isolation members **45** of singular material and varying thickness (as shown in Fig. 2), located on the surface of disk unit accomodating part **17**, which is provided in housing **13**. As relates specifically claims 12 and 23, it is noted that the thickness of a shock/vibration isolation member is an important factor in its absorbing characteristic, as taught by *Lawson* at column4 lines 66 and 67, and column 5, line 1.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Lawson* as applied to claim 10 or 12 above, and further in view of *Hager et al.* The device of *Lawson*, while including variable vibration/shock absorbing members, does not expressly provide for the members to have different hardnesses. *Hager et al.*, as discussed in para. 5, *supra*, does. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the variable hardness elastomeric members of *Hager et al.* into the invention of *Lawson*, especially considering the commercial availability and viability of the popular SORBOTHANE line of absorption members, which were well known to not just the inventors in *Hager et al.*, but also to the Applicants (as evidenced by their Invention Disclosure Statement). The use of elastomeric and viscoelastic materials to alleviate the impact of shock and vibratory-induced problems in sensitive electronic equipment is conventional and notorious in the art, and the sensitivity of both reference inventive entities to differing problems faced at different surfaces of a disk drive is sufficient motivation to combine them to teach the claimed invention.

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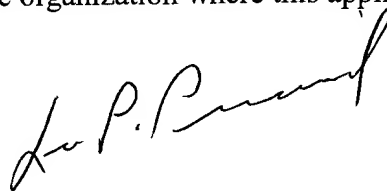
Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. *Branc et al.* teaches a shock/vibration absorption device for disk drives that includes a plurality of small members placed on all six sides of a box-like drive enclosure.

b. *Gatti et al.* depicts a vibration and shock-absorbing scheme for computer disk drives.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Reed whose telephone number is (703) 305-9844 . The examiner can normally be reached Monday through Friday from 8:00 AM to 4:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard, can be reached on (703) 308-0538. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3431.



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Art Unit 2835

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